REMARKS

Claims 1-28 stand rejected. Claims 1-28 remain pending in this patent application. Applicants respectfully request further examination and reconsideration in view of the arguments set forth below.

Attached hereto is a marked-up version of the changes made to the patent application by the current amendments. The attached pages are captioned "Version With Markings To Show Changes Made." Applicants respectfully submit that no new matter is introduced as a result of these amendments.

Drawing Objections

The drawings are objected to as failing to comply with 37 CFR §1.84(p)(4) because reference character "212" has been used to designate both Frame Buffer 212 and User Input 212 in Figure 2A. Applicants have herein amended Figure 2A to change User Input 212 into User Input 213.

The drawings are objected to as failing to comply with 37 CFR §1.84(p)(5) because they include the following reference sign not mentioned in the description: display device 218. Applicants have herein amended the specification to include the reference number "218".

The drawings are objected to under 37 CFR §1.83(a) because they fail to show display characteristic input lead 216 coupled to receiver 204 in Figure 2A as described on page 11, lines 7-8, in the specification. Applicants have herein amended the specification to recite that the display characteristic input lead 216 is coupled to

processor 208 as shown in Figure 2A. Applicants apologize to the Examiner for any inconvenience that may have been caused by these drawing objections.

Specification Objections

The disclosure is objected to because of the following informalities: "display device 200" on page 12, line 2, should be --video device 200--; and as objected to in the drawings, Frame Buffer 212 and User Input 212 have been designated with the same reference character throughout the specification. Applicants have herein amended the specification to correct the above mentioned informality and also to change User Input 212 into User Input 213. Applicants apologize to the Examiner for any inconvenience that may have been caused by these specification objections.

Claim Objections

Claim 16 is objected to because it is not included in the application. Applicants have herein amended the Claims to include a Claim 16.

Claim 26 is objected to because of the following informalities: there appears to be a typographical error in, "the video device recited in claim 11," the Examiner assumed that the Applicant intended "claim 11" to be --claim 14--. Applicants have herein amended Claim 26 to depend from Claim 14. Applicants apologize to the Examiner for any inconvenience that may have been caused by these Claim objections.

35 U.S.C. §102 Rejections

Claims 1-6, 8-19 and 21-28 of the present application are rejected under 35 U.S.C. §102(e) as being anticipated by Terasawa et al., US Patent Number 6,147,714 (hereinafter Terasawa). The Applicants have reviewed the Terasawa reference and, for the following rationale, Applicants respectfully submit that the present invention is not anticipated nor rendered obvious by the Terasawa reference.

CLAIMS 1 and 14

Applicants respectfully contend that the Terasawa reference does not teach or suggest the method of determining a portion of a block of text-based data to be provided to a display device as recited in newly amended independent Claims 1 and 14. For instance, amended Claim 1 recites in part (emphasis added):

> b) receiving <u>an input regarding an appearance</u> of said <u>display device</u>;
> c) <u>selecting said portion</u> of said block of <u>text-based data to be displayed</u> on said display device <u>based on said input</u>;
> d) <u>formatting</u> said <u>portion of said block of text-based data</u> to create an <u>image frame</u> for said display device;

Applicants respectfully assert that the Terasawa reference does not teach or suggest selecting a portion of a block of text-based data to be displayed on the display device based on the input as recited in amended Claims 1 and 14. Since the Terasawa reference fails to teach of suggest an element recited in amended Claims 1 and 14,

Applicants respectfully contend that the Terasawa reference cannot anticipate nor render obvious the present invention recited in amended Claims 1 and 14.

Based on the above rationale, Applicants respectfully submit that amended independent Claims 1 and 14 are not anticipated nor rendered obvious by the Terasawa reference. Therefore, Applicants respectfully submit amended Claims 1 and 14 are allowable over the Terasawa reference.

CLAIM 27

Applicants respectfully contend that the Terasawa reference does not teach or suggest the video display system as recited in newly amended independent Claim 27. For instance, amended Claim 27 recites in part (emphasis added):

> a <u>processor</u> for <u>formatting a portion of said block of text-based data</u> corresponding to said EPG information <u>into an array of columns and rows based on</u> said <u>display characteristic of said display screen</u> whereby more columns are displayed if said display characteristics indicate a wide aspect ratio display;

Applicants respectfully contend that the Terasawa reference does not teach or suggest a processor for formatting a portion of a block of text-based data corresponding to an EPG information into an array of columns and rows based on the display characteristic of the display screen as recited in amended Claim 27. Since the Terasawa reference fails to teach of suggest an element recited in amended Claim 27, Applicants

respectfully contend that the Terasawa reference cannot anticipate nor render obvious the present invention recited in amended Claim 27.

Based on the above rationale, Applicants respectfully submit that amended independent Claim 27 is not anticipated nor rendered obvious by the Terasawa reference. Therefore, Applicants respectfully submit amended Claim 27 is allowable over the Terasawa reference.

CONCLUSION

In light of the above listed amendments and remarks, Applicants respectfully request reconsideration of rejected Claims 1-28.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present application.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

The paragraph beginning on page 10, line 20, and ending on page 11, line 5, was amended as follows:

Referring now to Figure 2A, a block diagram of a video device 200 is shown, in accordance with one embodiment of the present invention. Video device 200 can be a display source device in a set-top box, a Personal Computer (PC) having a tuner for video viewing, a television set, such as a high resolution digital TV, or some other display device. Video device 200 includes a frame buffer 212, a processor 208, a memory 210, and a receiver 204. Processor 208 is coupled to frame buffer 212, memory 210, and receiver 204. Additionally, broadcast input lead 206, adapted to receive a video signal, is coupled to receiver 204. Broadcast input lead 206 can be adapted to receive a signal via cable, satellite, or antennae.

The paragraph beginning on page 11, line 7, was amended as follows:

Additionally, a user input lead 213 [212 and a display characteristic input lead 216] is coupled to receiver 204 in Figure 2A and a display characteristic input lead 216 is coupled to processor 208. User input lead 213 [212] is adapted to receive a signal from a user of a display device 218. A signal can be provided to user input lead 213 [212] via a number of sources such as a remote control device, a Video Cassette Recorder (VCR), or input devices, such as buttons, located on the display device 218. Display characteristic input lead 216 is adapted to receive a signal from [a] display

device 218. In one embodiment, video device 200 can have only a display

characteristic input lead 216 and no user input lead 213 [212]. In another

embodiment, video device 200 can have only user input lead 213 [212] and no display

characteristic input lead 216.

The paragraph beginning on page 11, line 17, was amended as follows:

Video device 200 of Figure 2A provides a single output on image output lead

214, which is coupled to frame buffer 212. Frame buffer 212 is adapted to provide a

formatted frame showing a portion of the EPG table. While the components of video

device 200 are shown in a specific arrangement and a specific coupling configuration,

the present invention is well-suited to adding other components and to altering the

coupling configuration to suit [suite] specialized applications.

The paragraph beginning on page 12, line 2, was amended as follows:

Memory 210 used in video [display] device 200, for the present invention, can

either be permanent memory, such as read only memory (ROM), or temporary memory

such as random access memory (RAM). Memory 210 can also be any other type of

memory storage, capable of containing program instructions, such as a hard drive, a

CD ROM, or flash memory. Furthermore, processor 208 can either be a dedicated

controller, an existing system processor, a microprocessor, or some form of a state

machine.

The paragraph beginning on page 12, line 18, and ending on page 13, line 8, was amended as follows:

Referring now to Figure 2C, a block of EPG data formatted for a 4:3 aspect ratio display device 240, in accordance with one embodiment of the present invention. Because display device 240 has a conventional aspect ratio, it can only display a nominal portion of a block of EPG data. Consequently, only the 9:00 a.m. slot 124a through the 9:30 a.m. slot 124b and the ABC channel 122a through the CBS channel 122b can all be displayed at once. While the present embodiment shows a specific quantity of time slots and channels for a 4:3 aspect ratio display device, the present invention is well-suited to displaying a wide range of time slots and channels. Furthermore, the present invention is well-suited to providing display information for a display device with any aspect ratio. The two embodiments provided in Figures [Figure] 2B and 2C were chosen because they are standards. In one embodiment, Figure 2B is a digital display device while Figure 2C is a conventional analog display device. Thus, the present invention accommodates both the new digital technology devices as well as the legacy analog devices.

The paragraph beginning on page 19, line 10, was amended as follows:

As an example for step 3008 through 3012, if an input indicating a high resolution, high aspect ratio 16:9, large television set is received, a relatively large portion of the display block will be selected for subsequent display on the display device. One embodiment of this scenario is presented in Figure 2B. Compared to conventional EPG display, a one and one-half hour portion, e.g. more columns, of EPG

data can be selected for display, and six stations, e.g. more rows, of the EPG data can be selected for display on the display device. That is, in one example, program information for 9:00 a.m. week 1 column 124a through 10:00 a.m. week 1 column 124c, for stations ABC 122a through <u>PAX 122f</u> [PBS 122e], can be chosen for subsequent display, as shown in Figure 2B. While the present example chooses a specific input situation, the present invention is well-suited to a plethora of cases, with their appropriate trade-off. Figure 2C provides an alternative embodiment of a conventional AR display device displaying a narrower and shorter table of EPG data.

The paragraph beginning on page 20, line 10, was amended as follows:

In step 3016 of the present embodiment, input regarding the appearance of the display is received. Input block 3016a is received as user input display characteristics. Step 3016 and input 3016a are implemented, in one embodiment, by the video device 200 shown in Figure 2A. Specifically, input from a viewer, or user, can be received via user input lead <u>213</u> [212]. A signal can be provided to user input lead <u>213</u> [212] via a number of sources such as a remote control device, a video cassette recorder (VCR), or input devices, such as buttons, located on the display device. This embodiment is particularly applicable when a display device does not have a component that will automatically transmit data regarding the display characteristics of the display device. In one embodiment the display characteristics of the display device provided by the user can include inputs such as the resolution, the aspect ratio (AR), and the physical size of the display. Additionally, the user can input a user-

definable font type and font size for the text of the data to be displayed. Following step 3016, process 3000 proceeds to step 3018.

The paragraph beginning on page 21, line 12, and ending on page 22, line 5, was amended as follows:

Step 3020 arises if no user-supplied display characteristics input exists. In step 3020 of the present invention, a portion of the block of data is selected, based on minimum display characteristics. Step 3020 [3014] is implemented, in one embodiment, by the video device 200 shown in Figure 2A. Specifically, video device 200 is adapted to select a portion of block of EPG data from memory 210, based on a default value for display characteristics, e.g. a conventional aspect ratio characteristic, also stored in memory 210. Display characteristics, such as minimum available display characteristics, can be pre-programmed in memory 210, received via broadcast input 206, or input by user via input lead 213 [212]. While the present embodiment begins with minimum display characteristics, the present invention is well-suited to alternative formats. For example, a median or maximum display characteristic format can be chosen. The present embodiment chooses a minimum display characteristic, such as minimum AR, minimum display device size, and minimum resolution, to provide a readable display of EPG data for all possible display devices. From this point, the larger AR, larger size, and/or higher resolution display devices can increase the portion of data to be viewed. Following step 3020, process 3000 proceeds to step 3022.

The paragraph beginning on page 22, line 17, and ending on page 23, line 4, was amended as follows:

In step 3026 of the present embodiment, input regarding the appearance of the display is received. A user can provide display device characteristics input 3026a. Step 3026 and input 3026a are implemented, in one embodiment, by the video device 200 shown in Figure 2A. Specifically, input from a viewer, or user, can be received via user input lead 213 [212], indicating the acceptability of the displayed portion of the block of EPG data chosen by the present embodiment. A signal can be provided on user input lead 213 [212] via a number of sources such as a remote control device, a video cassette recorder (VCR), or input devices, such as buttons, located on the display device (not shown). In one embodiment the user can provide a binary response, such as "yes" or "no," or a variable response, such as an input from "1" as worst to "10" as best. Following step 3026, process 3000 proceeds to step 3028.

The paragraph beginning on page 25, line 4, was amended as follows:

Process 4000 begins with step 4002. In step 4002 of the present embodiment, display characteristics of a display device are received. Step 4002 is implemented, in one embodiment, by the video device 200 shown in Figure 2A. Inputs on the display characteristics of a display device can be received either on user input lead 213 [212] or display characteristic input 216. Display inputs can include aspect ratio input 4002a, resolution input 4002b, and/or size input 4002c for the display device. Following step 4002, process 4000 proceeds to step 4004.

<u>IN THE CLAIMS</u>

Claims 1, 3, 8, 10, 11, 13, 14, 16, 19, 21, 23, 24 and 26-28 were amended as shown below:

1. (Once Amended) In a video device, a method of determining a portion of a block of <u>text-based</u> data to be provided to a display device, said method comprising [the steps of]:

a) receiving said block of <u>text-based</u> data;

b) receiving an input regarding an appearance of said display device;

c) selecting said portion of said block of <u>text-based</u> data to be displayed on said display device based on said input;

d) formatting said portion of said block of <u>text-based</u> data to create an image frame for said display device; and

e) communicating said image frame to said display device.

3. (Once Amended) The method recited in Claim 1 further comprising [the step of] storing said block of <u>text-based</u> data in a memory buffer for subsequent use.

8. (Once Amended) The method recited in Claim 4 wherein said block of <u>text-based</u> data is on-screen display information.

10. (Once Amended) The method recited in Claim 1 wherein said portion of said block of <u>text-based</u> data to be displayed and said formatting of said portion of said block of <u>text-based</u> data is adapted for a display device having an aspect ratio of 4:3.

11. (Once Amended) The method recited in Claim 1 wherein said portion of said block of <u>text-based</u> data to be displayed and said formatting of said portion of said block of <u>text-based</u> data is adapted for a display device having an aspect ratio of 16:9.

13. (Once Amended) The method recited in Claim 1 further comprising [the steps of]:

f) selecting a specific portion of said block of <u>text-based</u> data based on a default value for aspect ratio, resolution, and screen size of a class of display devices;

g) communicating an image frame formed by said specific portion of said block of <u>text-based</u> data to said display device;

h) receiving [user] <u>a second</u> input regarding an appearance of said image frame on said display device;

i) repeating [steps] f) through h) for each of different specific portions of said block of <u>text-based</u> data that are selected based on different available values of aspect ratio, resolution, and screen size of said class of display devices; and

j) identifying a new default value to be used with said display device based upon said <u>second</u> input regarding said appearance.

14. (Once Amended) A video device comprising:

a receiver unit <u>for receiving a</u> [adapted to receive said] block of <u>text-based</u> data;

a processor coupled to said receiver unit; and

a computer readable memory coupled to said processor and containing

program instructions stored therein that when executed implement a method for

determining a portion of <u>said</u> [a] block of <u>text-based</u> data to be provided to a display

device, said method comprising [the steps of]:

a) receiving said block of <u>text-based</u> data;

b) receiving an input regarding an appearance of said display device;

c) selecting a portion of said block of <u>text-based</u> data to be displayed on

said display device based on said input;

d) formatting said portion of said block of <u>text-based</u> data to create an

image frame for said display device; and

e) communicating said image frame to said display device.

<u>16.</u> (New) <u>The video device recited in Claim 14 wherein said input comprises a</u>

<u>resolution of said display device.</u>

19. (Once Amended) The video device recited in Claim 17 wherein said

display characteristics includes a screen size [and a resolution] of said display device.

21. (Once Amended) The video device recited in Claim 17 wherein said block

of <u>text-based</u> data is on-screen display information.

23. (Once Amended) The video device recited in Claim 14 wherein said

portion of said block of <u>text-based</u> data to be displayed and said formatting of said

portion of said block of <u>text-based</u> data is adapted for a display device having an

aspect ratio of 4:3.

24. (Once Amended) The video device recited in Claim 14 wherein said

portion of said block of <u>text-based</u> data to be displayed and said formatting of said

portion of said block of <u>text-based</u> data is adapted for a display device having an

aspect ratio of 16:9.

26. (Once Amended) The video device recited in Claim <u>14</u> [11] further

comprising [the steps of]:

f) selecting a specific portion of said block of <u>text-based</u> data based on a

minimum possible value for aspect ratio, resolution, and screen size of a class of

display devices;

g) communicating an image frame formed by said specific portion of said block

of <u>text-based</u> data to said display device;

h) receiving [user] <u>a second</u> input regarding an appearance of said image frame

on said display device;

i) repeating [steps] f) through h) for each of different specific portions of said

block of <u>text-based</u> data that are selected based on different available values of aspect

ratio, resolution, and screen size of said class of display devices; and

j) identifying a default value to be used with said display device based upon said _second_ input regarding said appearance.

27. (Once Amended) A video display system comprising:

[a)] a receiver for receiving a block of _text-based_ data corresponding to electronic programming guide (EPG) information;

[b)] a memory unit for storing information regarding _a_ display characteristic[s] of a display screen;

[c)] a processor for formatting a portion of _said block of text-based data corresponding to_ said EPG information into an array of columns and rows based on said display characteristic of said display screen whereby more columns are displayed if said display characteristics indicate a wide aspect ratio display; and

[d)] means for providing an output signal to said display screen to display said array.

28. (Once Amended) The method recited in Claim 1 further comprising [the step of]:

f) [programming a receiver to automatically] implement_ing_ vertical compression of said block of _text-based_ data with a first aspect ratio for display on said display device having a second aspect ratio.